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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,764	09/26/2003	Larry J. Castleman	SHA-129	2483
22855	7590	03/17/2006		EXAMINER
RANDALL J. KNUTH P.C. 1507 YUMA CT MURFREESBORO, TN 37129				PICKARD, ALISON K
			ART UNIT	PAPER NUMBER
			3673	

DATE MAILED: 03/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/673,764	CASTLEMAN, LARRY J.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Alison K. Pickard	3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,2,4-17,20,23-29,32-37,39,40,42,44-46 and 50-54 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,2,4-17,20,23-29,32-37,40,42,44-46 and 50-54 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1, 2, 4-17, 20, 23-29, 32-37, 39, 40, 42, 44-46, and 50-54 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not appear to provide support for the at least one seal being “removably” joined to the housing or for the bearing to be “permanently” joined. (Note: The portion of the specification Applicant cited (i.e. page 6, lines 1-5 in the reply of 4/6/05) does not even mention the seal. However, page 5, lines 23-24 (as well as claim 2) state the seal is bonded to the housing.)

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 4-8, 13, 15-17, 20, 23-27, 29, 32, 34-37, 39, 40, 42, and 44-46 are rejected under 35 U.S.C. 102(b) as being anticipated by Sheldon (3,559, 540).

Sheldon discloses a seal assembly comprising a housing 80 with an inner surface 103, a bearing device 105 permanently joined (by press fit, in that it won't slide out) to the inner surface, a first seal 110 in a first groove in the housing, and a second seal 104 in a second groove in the housing. The seals are removably joined to the housing (aren't fixed in the grooves). The second seal comprises a wiper element. The first seal includes a static area (portions contacting the surfaces of the groove are static seals) and a dynamic lip against the shaft.

5. Claims 1, 2, 4-6, 9-15, 20, 23, 24, 27, 28, 35-37, 39, 42, 45, and 46 are rejected under 35 U.S.C. 102(b) as being anticipated by Ulrich (5,957,461).

Ulrich discloses a seal assembly comprising a housing 60 having an inner surface, a bearing device 70 permanently joined to the inner surface (bearing is "secured" within housing), and at least one removable seal 30 (in that even a bonded seal can be removed). The seal 30 comprises a body, a first leg 44, 46, or 48, a second leg (part near line 38 in as much as applicant's part 204 extends radially outward), and a finger portion extending over a radial and axial portion of the housing. The finger portion extends radially outward past the outermost surface of the housing to form a static seal against another part 14.

#### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 50-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sheldon in view of Narita (2002/0051587).

Sheldon does not appear to disclose the bearing is adhesively bonded to the housing. Narita teaches a bearing device 13 on an inner surface of a housing 12. Narita teaches using adhesive to fix the sleeve in the housing. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to use adhesive to fix the bearing in the housing. (Note: Sheldon '549 and Cesaraccio provide additional evidence that it is known to use an adhesive to fix a bearing in a housing.)

***Allowable Subject Matter***

8. Claim 33 has allowable subject matter but has not been indicated as allowable due to the 112 1<sup>st</sup> rejection.

***Response to Arguments***

9. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

The prior art shows that the bearing sleeves can be adhered or press-fit within housings. Both methods are considered "permanently joined" in that the sleeves are secured within the housings in a tight, gap-free interface. Using a bond or adhesive to join two elements does not actually create a "permanent" union in that bonds can be separated via various tools. Similarly, a bonded/adhered joint is considered "removable" in that the bond can be separated. The specification requires the bearings to be fixed/joined/bonded/etc. to the housing in a gap-free interface. The examiner submits that the press-fit interfaces in some of the prior art achieves this relationship and therefore meets the definition of "permanently joined" in as much as it is supported by the disclosure. Regardless, Narita teaches that a bearing can be adhered OR press fit in a housing.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alison K. Pickard whose telephone number is 571-272-7062. The examiner can normally be reached on M-F (10-7:30), with alternate Friday's off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tricia Engle can be reached on 571-272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alison K. Pickard  
Primary Examiner  
Art Unit 3673

AP